Government of
Saskatchewan

2005-2006
Annual Report

Saskatchewan Health
Information Network

An Agency of the
Health Information Solutions
Centre at Saskatchewan Health

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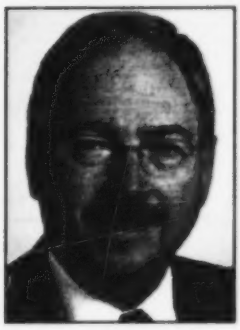
This annual report is also available in electronic format from the department website at http://www.health.gov.sk.ca

Letter of Transmittal



Regina, Saskatchewan
March 31, 2006

Her Honour the Honourable Lynda Haverstock
Lieutenant Governor of Saskatchewan

May it Please Your Honour:

I respectfully submit the Annual Report of the Saskatchewan Health Information Network (SHIN) for the fiscal year ending March 31, 2006, including the financial statements duly certified by auditors for the Corporation, and in the form approved by the Treasury Board, all in accordance with *The Crown Corporations Act, 1993.*

Respectfully submitted,

Honourable Len Taylor
Minister of Health

Letter from the Board Chair

2005-06 was a momentous year in advancing the development and implementation of health information technologies in Saskatchewan with the successful launch of the first of our electronic health record system initiatives – the Pharmaceutical Information Program (PIP). PIP is an excellent example of the benefits of introducing electronic information technologies that improve the quality, access and effectiveness of front-line health services. Through PIP, authorized health care providers will now have access to information they need in providing better care to their patients. PIP reduces the risks of duplicate medications and drug-to-drug interactions which are a major safety concern.

Our continued progress this past year reflects the stronger, more cohesive and comprehensive approach we have taken in our province to make the best use of information technologies, such as electronic health records and Telehealth, in supporting improvements in the delivery of health services through *The Action Plan for Saskatchewan Health Care.*

In the past year, we continued to leverage earlier investments in our province-wide network, systems solutions and infrastructure to support the extension of Telehealth and clinical information systems to new locations in our health regions. Through continued engagement of our health regions and professionals in setting priorities and coordinating planning for the introduction of new electronic health record technologies, we were again very successful in securing funding from Canada Health Infoway to continue implementing new projects. Planning for several of our projects is in the advanced stages, and we expect implementation of several new elements of our province's electronic health records strategy will take place in 2006-07. These initiatives demonstrate the benefits of Saskatchewan's approach in working closely with our health delivery partners to introduce innovative and highly effective technologies for improving the health of our citizens.

Lawrence Krahn
Board Chair – SHIN

Letter from the CEO

2005-06 was a year with an enormous amount of activity. The integration of SHIN staff and operations into the Health Information Solutions Centre has allowed us to reduce the costs of administering the corporation, while strengthening our capabilities in implementing the information technology solutions that SHIN provides to our health regions and other health sector customers.

During the year, some further milestones were reached, including implementation of the first phase of the Pharmaceutical Information Program. In this phase, authorized clinicians will be able to access complete profiles of all the drug prescriptions their patients are receiving from community pharmacies. This is an important step in providing authorized patient care professionals with the information they need in providing safe and effective care through electronic health record (EHR) technologies. Planning with health professionals for the next phase of PIP, to enable physicians to prescribe electronically, is well underway. This next phase will further enhance patient safety by automatically detecting drug-to-drug interactions and by providing physicians with the latest information on drug therapies at the time they are prescribing.

Significant planning work is also underway in developing other electronic health record technologies to further support patient care improvements, by making laboratory and diagnostic imaging information available electronically to authorized care providers in the future. This planning is occurring in close concert with Canada Health Infoway and other provinces to ensure that we minimize the investments necessary to implement these important technologies and maximize the benefits to our patients and health professionals.

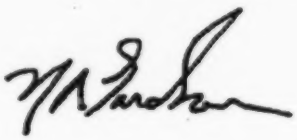
In addition, work continued in further enhancing existing services by utilizing our technologies and infrastructure in innovative ways. In 2005-06, eight new Telehealth sites were added to the provincial network, improving access to specialists' services in several communities. In addition, further enhancements were made to the Surgical Patient Registry, the first system of its kind in the country and one that is attracting national attention for our use of information technology in addressing waiting lists. A further example of the innovative work we are involved in is Saskatchewan's role in the development of a pan-Canadian Public Health information system, through Canada Health Infoway. This new system will enable public health professionals in the province to manage communicable diseases and outbreaks much more effectively using state-of-the-art technologies to protect the public's health.

Utilizing SHIN's provincial network, the Health Information Solutions Centre was again able to provide more services to more locations over the past year. The number of health care sector staff utilizing the network and its services grew twenty-five per cent during the past year.

This past year was a very important one in establishing the foundation for the electronic health records (EHR) program in Saskatchewan. The investments made by Saskatchewan Health, through SHIN, have developed the network and a core of care provider information systems that will now enable the development of electronic health record solutions across the province in the years ahead. The EHR program will ensure authorized front-line care providers have access to the information they need in treating their patients – improving the quality, access and effectiveness of health care services across the province into the future.

Through SHIN, the Health Information Solutions Centre is leading several new electronic health records projects in Saskatchewan, in partnership with Canada Health Infoway (Infoway), which was established to accelerate the development of electronic health records in Canada. Through our partnership with Infoway, we attracted $5.4 million in funding to advance the establishment of province wide EHR solutions in 2005-06 for several of our projects.

I am again looking forward to working with our staff, health regions and health sector partners in advancing implementation of our province's innovative and vital agenda in utilizing modern technologies to improve the health of our citizens.



Neil Gardner
Chief Executive Officer – SHIN

Vision, Mission and Values

The Vision

Through a collaborative effort, ensure health professionals have secure access to the right information, at the right time and place.

Our Mission

- Enhance the quality of patient care by supporting health professionals' decision-making at the point of care through improved access to the information they require.
- Improve the patient experience by supporting improved coordination between service delivery care providers. Provide high levels of security and privacy safeguards to support the exchange of the information between care providers.
- Improve overall efficiency, effectiveness and sustainability of the health sector through the innovative use of technology.
- Inform health system decision-making by providing the necessary information base to support planning, outcome measurements, accountability and research.

Values

We believe in...

- Excellence through innovation, creativity, continuous learning and recognition of achievements;
- Honesty, integrity and openness and respect for all of our relationships;
- Collaboration and teamwork;
- Actions which are client-centered and results-oriented;
- Security of information and privacy of individuals;
- Equitable access to information for our customers;
- Fostering development of information technology in the Saskatchewan health-care sector.

Health Information Network Development

The provincial health information network connects health care providers across the province, ensuring they have access to timely, pertinent and available information in caring for their patients. Through SHIN, the health information network continues to be developed in collaboration with health regions and health professionals across the province. This approach ensures that technology investments in the health sector are coordinated with the regions to determine the best way to deploy emerging information technologies for the benefit of the citizens of the province.

In 2005-06 Health Information Solutions Centre (HISC) staff continued to work with other provincial partners including SaskTel and the Information Technology Office (ITO), to continue the development of the high-speed, province-wide telecommunications network (CommunityNet) connecting schools, regional colleges, health facilities, public libraries and government offices. Work continues to extend secure network technologies to other health care locations across the province. Another key focus was on planning and developing network capacity and redundancy in preparation for the Radiology Information System (RIS) and Picture Archiving Communication System (PACS), which will support the *Action Plan for Saskatchewan Health Care* initiative to improve diagnostic imaging services in the province.

The network provides authorized health care professionals with access to clinical information systems and supports the Telehealth network, which enables health providers to consult and treat patients remotely. The network also provides email infrastructure to all health regions and retail pharmacies across the province, enabling health sector staff to communicate electronically in coordinating the care of their patients.

Currently, all health regions and more than 800 health service locations are connected to the health information network through CommunityNet connections and other secure telecommunication technologies.

Technology Support Services

Service Desk

The Service Desk supports health care staff in making effective use of the provincial health information network and its supporting technologies, services and systems.

Users of the Service Desk are provided with tier one or first line Help Desk support on all their computer problem calls. In addition, the Service Desk provides support for all clinical information systems hosted in the HISC Data Centre.

As of March 31st, 2006, 12,516 health care staff (of a potential 38,000 across the provincial health sector) had access to the HISC service desk. This reflected an increase of over 25 per cent or 3100 users over 2004-05.

To date, all health regions, as well as the College of Physicians and Surgeons of Saskatchewan, the Saskatchewan Cancer Agency, the Department of Family Medicine at the College of Medicine and the Saskatchewan Registered Nurses' Association are utilizing this service. Of the over 65,000 calls received by the Service Desk in 2005-06, less than 29,000 had to be dealt with by regional technical resources. This reduces the demand on scarce resources in the health sector. HISC Support Services staff directly resolved over 50 per cent of the calls.

In 2005-06, the annual survey of system users of the Service Desk found that 98.6 per cent of respondents were generally satisfied with the service provided by the HISC Service Desk, with more than 68 per cent indicating they received exceptional service.

The Service Desk operates between 7:00 a.m. and 9:00 p.m. on weekdays. In addition, on-call support for clinical systems hosted in the HISC Data Centre, is available twenty-four hours a day, seven days a week.

Data Centre Hosting Environment

Through the Saskatchewan Health Information Network (SHIN), the Health Information Solutions Centre provides a secure hosting environment to support the work of its health sector partners. The central hosting environment reduces the need for IT equipment and system specific resource demands on regions.

This centre enables regions to share sophisticated system solutions. Each system is hosted centrally in the data centre and is securely accessed by regions over the health information network, reducing costs to the health sector and enabling better and more integrated patient care systems. Systems are built and sized to meet existing capacity and are designed to be scaleable to expand to meet future requirements. These systems serve front-line health care professionals across the province.

Twenty-three systems are being centrally hosted for regions or agencies, including a long-term care assessment system accessed by more than 2500 users in 156 long-term care facilities. The data centre also hosts a renal data management system accessed by 339 health care staff, and a long-term care electronic patient record used by 366 long-term care providers. The data centre provides website services for health regions and is currently hosting seven different sites.

In 2003-04, the data centre began hosting new lab, pharmacy and CPI registration systems, and new systems for provincial initiatives such as the Saskatchewan Surgical Care Network.

At the end of 2005-06, other systems being used by health region staff included:

- **Home Care Administration System**: used by over 600 users in ten health regions to better schedule and manage the care of over 100,000 clients, recording information on over 1.2 million home visits.

- **Registration System**: assists over 1400 staff in the admitting departments of eight health regions to streamline admitting processes, registering over 530,000 patients. As interfaces to other systems in the regions continue to be developed, there will be a significant reduction in the number of times that staff need to capture this information again when clients are being registered for other health services in the region.

- **Laboratory Information System**: captures lab test results directly from automated testing equipment and was used by over 330 staff in five regions to more efficiently and quickly process over 540,000 lab specimens.

- **Pharmacy System**: used by over 100 staff to fill over 500,000 prescriptions for hospital patients in seven health regions.

Services of the data centre will continue to expand in 2006-07 as the currently hosted systems are extended to more regions within the province, and as new province-wide clinical systems such as the Pharmaceutical Information Program (PIP) are implemented and integrated with these first regional systems.

Network Security

The security of health information remains a key focus. A number of resources and technologies are employed to maintain the security of patient information though a complex Security Architecture which includes such as items as: firewalls, intrusion-detection software, virus-detection measures, server isolation, user access controls and encryption. These materials and procedures are vital in maintaining the security of information on the network and in the data centre.

In addition, with all new applications, work is done to develop policies, practices, and audit processes that increase the level of security for patient records and personal information beyond what has existed with paper-based files. For example, authentication (log-in) procedures ensure only authorized personnel have access to specific information. Audit trails indicate when and who has accessed the data. As well, detailed testing is undertaken to ensure proper secure function of applications.

Independent security assessments conducted for the SHIN Corporation in 2004-05 on selected applications found that the security controls on personal health information continue be effective and extensive. Emphasis on security assessments by both external and internal auditors will be made to ensure future applications and personal health information are protected.

Security is critical in the operation of the health information network and data centre, and it will remain a key focus of ongoing development and enhancement. Saskatchewan is working in collaboration with the other provinces and Canada Health Infoway to ensure that the highest levels of security are incorporated into our health information technology solutions as technologies continue to evolve.

The National Context

Major health system reviews and reports in Canada over the past few years have indicated the need for electronic health record systems. Both the Romanow and Kirby Commissions, in addition to the recent report of the Health Council of Canada, have identified the need for investments in information technology to improve access, effectiveness and quality of health care.

Saskatchewan has been an active member of the Western Health Information Collaborative (WHIC) since 1999-2000. Other WHIC members include Alberta, British Columbia, Manitoba, the Northwest Territories, Nunavut and the Yukon. WHIC has been working together on common health information initiatives, and sharing lessons learned while implementing different facets of the technologies required to support a fully integrated health system. As a result, the WHIC partners learn from each other and move quickly and efficiently to solutions.

Increasing collaboration on electronic health record developments has been taking place across Canada with Canada Health Infoway (Infoway). Infoway is an independent agency established by the First Ministers of the provincial, territorial and federal governments to accelerate the adoption of electronic health record solutions in Canada. To date, Infoway has received $1.2 billion from the federal government. Infoway is fostering the development of pan-Canadian standards and approaches for EHR technologies with the provinces and territories and has established nine programs for investing in components of the electronic health record initiatives taking place in each province.

In Saskatchewan, Infoway has provided funding for the expansion and implementation of the provider registry originally developed by WHIC in British Columbia. The provider registry has attracted national attention – both Health Canada and Infoway have provided funding for its development. The provider registry will mean that health facilities will no longer need to keep numerous paper lists of health care provider information, reducing the onerous task of updating these lists and facilitating referrals for services between care delivery locations.

Planning also began for three additional projects, which are receiving approval by Infoway for investment in Saskatchewan. These projects, described in the "Enabling Province-wide Health Care Delivery" section on page 11 are the next phase of the Pharmaceutical Information Program, the Laboratory Results Repository and the Interoperable Electronic Health Record. These information systems projects support provincial health care objectives identified as priorities by Saskatchewan Health and the health regions though our information technology planning process. With the support of Infoway, HISC is able to share and leverage the experience of other provinces, while receiving significant investment from Infoway to implement critical components of our electronic health record strategy in Saskatchewan.

In the coming year, implementation of new projects, now in the planning stages, will continue. The Health Information Solutions Centre expects to receive approval and a funding commitment from Canada Health Infoway for several additional project investments including a system for better managing communicable disease outbreaks for Public Health.

Saskatchewan will continue to play a very active role in pan-Canadian health information initiatives, directions and system interface standards. These developments are consistent with our collaborative approach to leveraging new technologies in improving the health of our population.

Projects

Each year, the Health Information Solutions Centre (HISC) provides strategic leadership in defining, coordinating and implementing the vision for advancing information technology solutions in support of health services throughout Saskatchewan. This ensures strategic alignment with the priorities and plans of Saskatchewan Health, Regional Health Authorities, and other provincial stakeholders.

Through the Saskatchewan Health Information Network (SHIN), the Health Information Solutions Centre uses projects as the primary vehicle for delivery of new systems and technology solutions to support health care. Consistently delivered through strong project management, these project initiatives advance our province's progress in ensuring authorized health care professionals have secure access to the right information, at the right time and place.

HISC's project portfolio is based on Saskatchewan's health sector information technology priorities. These priorities are categorized in the following program areas:

- Integrated Clinical Systems (ICS) implementations for health regions;
- enabling Province-wide health care delivery; and
- enabling the *Action Plan for Saskatchewan Health Care*.

Integrated Clinical Systems Implementations (ICS) for Health Regions

HISC is working with regional health authorities to implement common, shared patient care computer systems that support front-line delivery through a program called Integrated Clinical Systems (ICS).

ICS consists of home care, central patient index/registration, laboratory, transcription and pharmacy systems. In some regions, this means upgrading existing systems while in others, it is the automation of processes that are currently being completed manually. The new systems are hosted at the HISC data centre in Regina, and accessed by regional staff over the health information network.

In 2005-06, a central patient index (CPI) system was implemented in the Prairie North (Lloydminster), Sun Country, Heartland and Mamawetan health regions. Planning began for implementation of the CPI system in Prince Albert Parkland and Keewatin health regions; and for implementation of the lab system in Prairie North (Lloydminster), Sun Country (Weyburn) and Mamawetan health regions.

The Kelsey Trail health region migrated its local CPI system to the centrally hosted version in SHIN's data centre. Pharmacy systems were implemented in Sun Country, Kelsey Trail and Sunrise (Canora, Kamsack) health regions. The minimum data set (MDS) module for assessing home care clients was implemented in Prince Albert Parkland and Cypress health regions. (see figure 1)

As the foundation of common applications is established, a clinical view application will enable authorized health providers to view a summary of relevant information about their patients quickly and securely. Over time, this integrated system will mean accurate and more complete patient information will be available to authorized care providers when and where they need it.

A major milestone in the ICS program was reached in 2005-06. The clinical view application was successfully implemented in the Sunrise (Yorkton) health region. The clinical view application (known as Sunrise Clinical Manager or SCM) enables more effective communication between care providers. With SCM, all authorized care providers within the circle of care for a particular patient (e.g. the attending physician, admitting physician, referring physician, consulting physician, nurse unit manager, ward nurse) can securely share information.

- SCM provides virtually instant access to lab results done within the hospital lab: most importantly all blood work. The way lab result information is displayed within SCM allows authorized care providers to trend lab results graphically over time, as well as being visually alerted when there is an abnormal lab result.

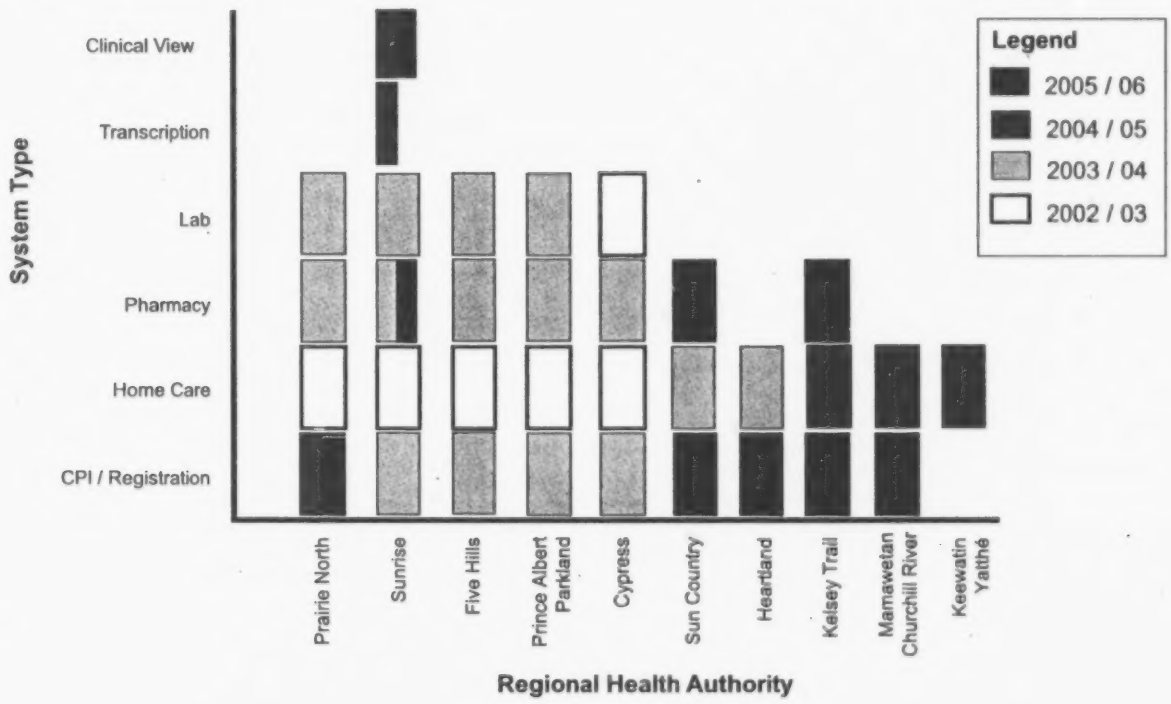
- In the past, paper charts had to be manually perused and new information located and filed. SCM provides access to documentation immediately upon completion of transcribing the document. The types of documents available for viewing by authorized care providers include: history and physicals, discharge summaries, consultations, OR reports, and pathology reports. All access to the documentation is electronically audited.

- SCM provides a concise and complete visit history for a patient. This information was not available in the manual paper chart.

- Every care provider has the ability to customize SCM patient lists to meet their specific needs around which patients and what patient information is most valuable to them. These lists are dynamically updated. For example, if a care provider wishes to see all of their patients on ward "B", the patient list will be updated as patients are admitted and discharged from this ward. A physician in Yorkton shares this observation:

  "Knowing who is where on the wards helps me plan my rounds. I know if a patient of mine has been admitted under a specialist while I was away, which I never knew before, unless I saw them on the ward by coincidence. This provides opportunities to share useful information with the specialist. I can also just pop in and say 'hi' in passing, which the patients appreciate".

Figure 1 – ICS System Implementation



Enabling Province-Wide Health Care Delivery

Several projects were concurrently in progress during 2005-06 that support establishing the foundation for the electronic health record (EHR) program. As an agency of the Health Information Solutions Centre, SHIN is leading projects that will promote the advancement of the Saskatchewan's EHR strategy in partnership with Canada Health Infoway ("Infoway").

Through our partnership with Infoway, SHIN was able to leverage an additional $5.4 million dollars of project funding to advance the development of our electronic health record (EHR) program. (see figure 2 and table 1)

In 2005-06, the province's electronic health record content repository was implemented. This is a part of the path toward an electronic health record. The Pharmaceutical Information Program – PIP (community drug information) made prescription drug information available to authorized health care providers in locations such as emergency wards, pharmacies and physicians' offices. Through this implementation, the province has realized the following benefits:

- Reduced multi-doctoring. This has been the major benefit reported from users to date.
- Reduced prescription errors. By having a more complete profile available, pharmacists and physicians are able to see potential drug interactions. This is especially important for patients with multiple prescriptions from different prescribers. (e.g. seniors and patients with chronic conditions)
- Better Health Care Provider Communications. With more physicians starting to use PIP there will be fewer calls to pharmacies for profiles. Also, with the "look up" feature for Exception Drug Status (EDS), there should also be reduced for pharmacists to call the Drug Plan. This adds up to time savings for providers in treating their patients.

Figure 2 – Provincial Electronic Health Record Program

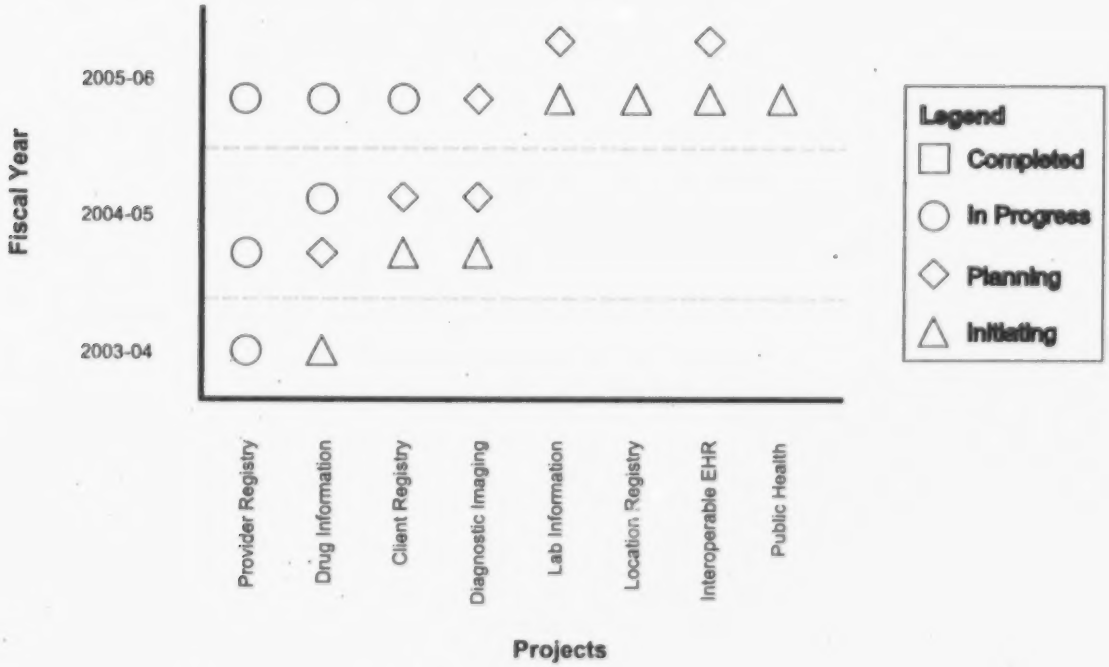


Table 1

Project Name	Project Description	Accomplished in 2005-06
Pharmaceutical Information Program (Drug Information System)	The Pharmaceutical Information Program (PIP) will provide health care professionals and patients with information and tools to make optimal drug therapy decisions to improve the quality, safety and management of health care for Saskatchewan residents.	Through the involvement of a cross-section of physicians, pharmacists, nurses and other health professionals, the PIP project completed the clinical requirements for the upcoming electronic prescribing phase and successfully implemented the pre-production rollout of the medication profile viewer to selected sites across the province.
Shared Client Index (Client Registry)	The Shared Client Index will be the trusted and timely source to confidently, accurately, securely and uniquely identify all persons who have contact with the health care system in Saskatchewan regardless of service, location, residency and/or insurance coverage.	Implemented eight of thirteen passive interfaces (one way) of regional health authority source registration data to the provincial client registry. Completed data quality remediation of passive sources (e.g. eliminated duplicates). Completed planning for active (two way) interfacing with the provincial client registry and regional registry source systems.
Diagnostic Imaging (Provincial RIS / PACS & Archive)	The objective of the provincial Diagnostic Imaging System initiative is to implement a common shared Radiology Information System (RIS) and Picture Archiving and Communications System (PACS) infrastructure for the province.	Working with health regions, HISC completed several stages of the planning process for a provincial Diagnostic Imaging solution. Saskatchewan collaborated with Infoway and other provinces in this work.
Provider Registry	The Provider Registry System is a standards-based repository of core licensed/unlicensed provider data supplied by authorized sources, and available to authorized consumers, that enables the formal and consistent exchange of provider health information.	Initiated the upgrade to version 4.0 of the Provider Registry software. Planned implementation and subsequent 'go-live' is scheduled for Fall 2006.

Project Name	Project Description	Accomplished in 2005-06
Laboratory Results Repository	With our investments in laboratory information systems through the Integrated Clinical Systems project (ICS), lab results (including all complex tests) are now captured electronically for over 90 per cent of laboratory tests in the province. Results from these systems, however, must still be distributed in traditional ways (e.g. by fax and by mail) resulting in delays in local physicians being able to diagnose and treat patients. This solution will address this concern by bringing together all of a patient's recent lab tests into a secure and electronically available profile. This will also address another concern – that physicians may not be aware of other lab tests the patient may have recently received and unknowingly order a duplicate lab test when a current result is available and could be used in diagnosing a patient right away.	This year was a planning year for the project. The core project team was assembled and a steering committee made up of regional representatives was established. The project team working with the steering committee defined the objectives and benefits of the project and set the scope for moving forward. Planning activities are scheduled to be complete in September 2006. Saskatchewan is also participating in pan-Canadian work in this area to establish the necessary standards for electronic communication of lab results.
Interoperable Electronic Health Record (EHR)	The purpose of this project is to implement electronic health record technologies that will enable front-line care providers to communicate effectively in coordinating a patient's care. These technologies will provide authorized health care professionals with secure access to the information they require in planning safe and effective care.	This was a planning year for the project. The core project team was assembled and a number of workshops were held with Canada Health Infoway to identify objectives and technology alternatives. Planning is scheduled to be complete in October 2006.

Saskatchewan EHR Blueprint – 5 Year Vision

Figure 4 illustrates how the projects, which are being planned and implemented, will integrate together to provide authorized health care providers with increasingly valuable information in caring for their clients through the province's electronic health record strategy into the future. The development of this five year 'blueprint' for integrating clinical systems across the health sector is a critical element in ensuring all of the systems, components and investments fit together; enabling our province to make optimum use of electronic health record technology in improving the health of our population. This blueprint has been developed to address our health sector's needs, by utilizing the expertise and experience that has been developed in Canada in collaboration with Infoway and the other provinces.

The Blueprint contains five conceptual areas.

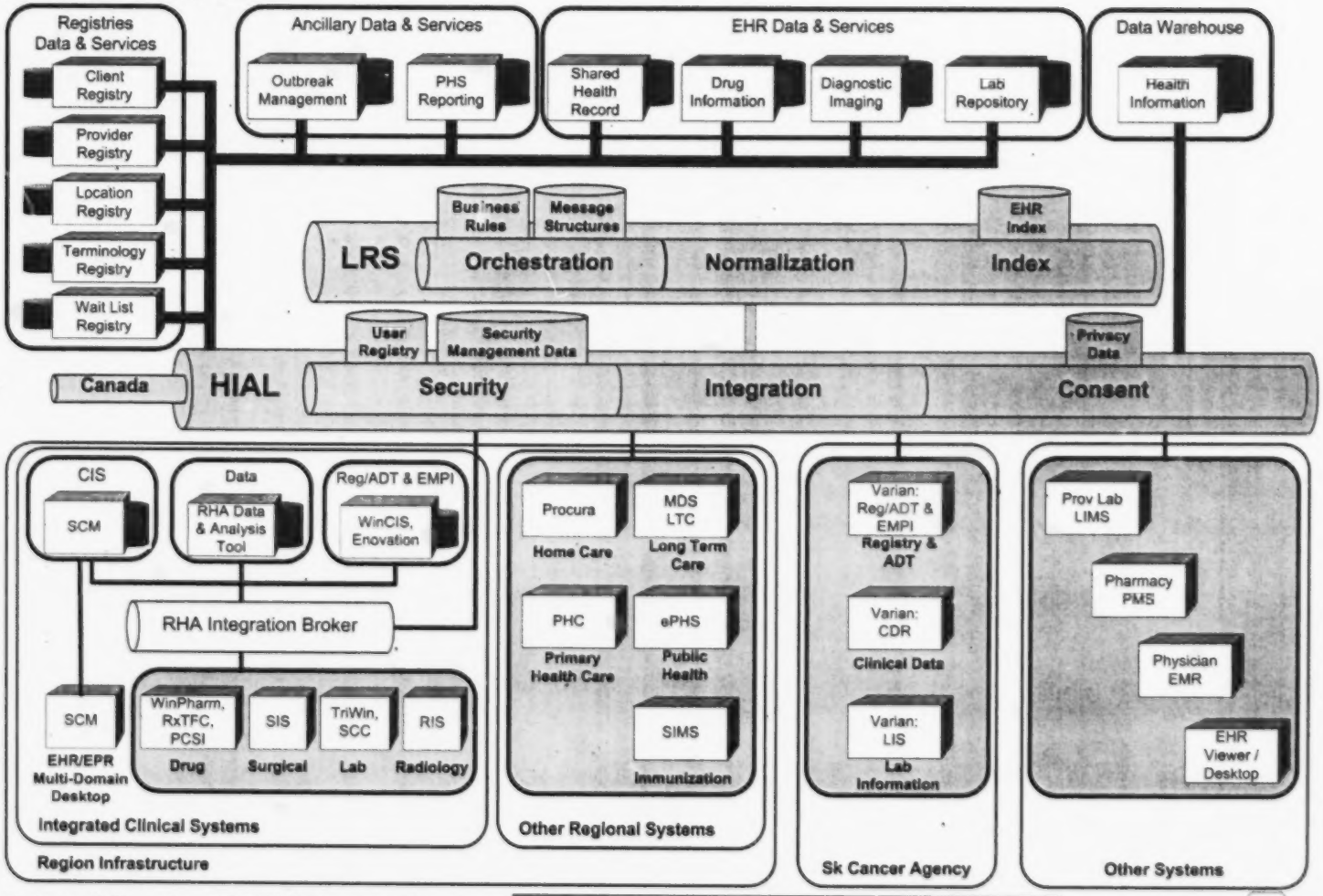
(Moving from the bottom of Figure 4 to the top):

- The Point-of-Service Infostructure (lower section of Figure 4) illustrates the many types of systems that are utilized to meet the business needs of the different front-line care providers. e.g. the ICS program (in the lower right hand corner), which is implementing an integrated set of systems to support the needs of clinical care providers in our hospitals.
- The Health Information Access Layer (HIAL), in the middle of the Blueprint, provides the provincial network, communications, security and data access/consent features. The HIAL will enable the providers' point-of-service systems to communicate securely and electronically with other points of care and to access provincial data services (such as the drug information being made available through PIP).
- The Longitudinal Record Services (LRS) processes requests from the point-of-service systems for clinical information from province-wide databases (such as requests from clinicians for drug, lab or diagnostic imaging results) to ensure that the correct information is assembled and delivered back to the point of service systems.
- The Registries (upper left-hand corner) enable patient, provider, terminology and service location codes to be cross-referenced, so that data can be consistently and accurately integrated from the many source systems for the provincial electronic health record services.
- The Data Services section of the Blueprint (at the top) represents the systems (such as PIP) that bring together the information from all the relevant care delivery locations (e.g. drug prescriptions from pharmacies) that is frequently needed by care providers for making better patient care decisions.

Figure 4

Saskatchewan EHRi Blueprint – 5 Year Vision

Provincial Infostructure



Point-of-Service (POS) Infostructure

POS Infostructure will continue to evolve as future needs are identified

V3.0

Enabling *The Action Plan for Saskatchewan Health Care*

In December 2001, the government released *Healthy People. A Healthy Province. The Action Plan for Saskatchewan Health Care.* The Plan adheres to a clear vision: building a province of healthy people and healthy communities.

The four main areas addressed in *The Action Plan for Saskatchewan Health Care* are:

- doing more to support good health and prevent illness;
- providing better access to health services, including primary, hospital and emergency care;
- improving health workplaces and addressing shortages of key health providers ; and
- placing a greater emphasis on quality, efficiency and accountability, in order to ensure the long-term sustainability of our Medicare system.

Information technologies and their management have an important role to play in enabling these areas. HISC is focused on developing innovative information technology solutions in the areas with the greatest potential to improve health service delivery. Each year several projects are concurrently in progress that support this plan. (see table 2)

Table 2

Project Name	Project Description	Accomplished in 2005-06
Primary Health Care	Strategies for effective delivery of primary health care to chronic disease patients are central to primary health care reform and sustainability of the health care system. To support these strategies, interactions with primary health care teams need to be linked through clinically relevant information systems with follow-up initiated by relevant members of the primary health care team. Innovative models of primary health care will result in better health, improved access, more satisfied providers and the relief of pressures elsewhere in the health system.	Business and technology requirements to support our Primary Health Care model are being evaluated. A major initiative for 2005-06 was implementation of the supporting system for Health Quality Council's Chronic Disease Management Collaborative – an initiative to improve the care and health of people living with coronary artery disease and diabetes in Saskatchewan.

Project Name	Project Description	Accomplished in 2005-06
Surgical Information System (formerly OR Scheduling)	The surgical information system (SIS) will provide comprehensive decision support for the planning and delivery of surgical care and is a component of our waitlist strategy. The implementation of a surgical information system in each of the five mid-sized regions and the Saskatoon Health Region will provide the base for improved management of surgical resources in these health regions. The project scope includes surgical scheduling, surgical charting and integration with regional materials management systems. The system will also support improved data exchange between the surgery booking offices, physicians and the wait list registry through automated interfaces. The benefits of this type of system include improved information for wait list management (wait time reporting), improved information for surgical productivity (theatre utilization) and cost effectiveness, and increased quality of care delivered to patients.	A comprehensive system solution was selected and detailed planning was completed with the health regions so that implementation can begin in 2006-07.
Telehealth	Telehealth technology allows specialists to conduct consultations with patients and provide education and support to local physicians. Using advanced video technologies across the health information network, these services support the delivery of health services in remote communities across the province.	Opportunities for utilizing Telehealth technologies continue to increase (for tele-consultations, professional education and meetings). Eight new Telehealth sites were implemented in 2005-06.
Renal Management	The Renal Management System enables renal disease specialists in Regina and Saskatoon to remotely monitor the progress of patients. This service reduces the amount of travel necessary for patients who receive dialysis services at their local regional hospitals.	HISC continued to provide the technical support necessary for the renal data management system. This technology enables specialists in urban centres to monitor renal patients who can be treated closer-to-home through satellite clinics in regional centres.

Project Name	Project Description	Accomplished in 2005-06
Saskatchewan Surgical Care Network (SSCN)	The Health Information Solution Centre provides technology services to the Saskatchewan Surgical Care Network (SSCN). A major component of the SSCN is the Surgical Patient Registry, which tracks patients needing surgery in the province and enables the prioritization of individual patients for surgical procedures. SSCN allows for improved management of surgical capacity across the province.	During 2005-06 HISC provided the information technology systems, infrastructure and support services necessary for the operation of the Surgical Patient Registry. Through this technology, decision-making and priorization of surgical services to meet patients' needs in the province is being enhanced. The SSCN Registry has attracted interest from several other provinces interested in utilizing this technology for wait list management.
Information Resource Development	The Information Resources Development Program (IRD) will provide a more integrated environment to house data collection systems for the health sector. This will enable authorized health care managers and planners to better manage and evaluate services, plan future programs and ensure health system accountability.	Consultations have begun with stakeholders to define reporting requirements and identify future needs. Enhancements were made to existing reports to better address the needs of users of information throughout the health sector. In 2006, a conference on Health data will be provided to assist stakeholders in better understanding the data that is available to address their decision making needs, and to build capacity in interpreting and utilizing the data for planning and managing health services.
Staff Scheduling	The effectiveness of human resources is a key issue for the sector. The health care sector employs 37,000 employees of which approximately 24,600 are on some type of shift. Examples of the significant benefits in implementing a staff scheduling system include: reduced time spent on clerical tasks by clinical managers and support staff; reduced frustration by health professionals, and improved scheduling and utilization of our health human resource capacity.	Work on this project commenced in early 2006 with the beginning of the planning phase, development of the steering committee and working groups. The Saskatchewan Association of Health Organizations (SAHO) is taking a lead role in working with Saskatchewan Health and the health regions. SHIN provides the enabling technology for this initiative.

Management's Responsibilities

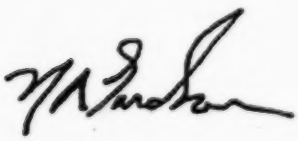
The accompanying financial statements included in the Annual Report for the year ended March 31st, 2006, are the responsibility of management.

Management has prepared these financial statements in accordance with generally accepted accounting principles in Canada, consistently applied using management's best estimates and judgments where appropriate.

The Board is responsible for overseeing the business affairs of the corporation and also has responsibility for approving financial statements. The board fulfills these responsibilities by reviewing financial information prepared by management and discussing the relevant matters with management and external auditors.

Management maintains a system of internal controls to ensure the integrity of information that forms the basis of the financial statements. The internal controls provide reasonable assurance that transactions are recorded and executed in compliance with legislation and required authority; that assets are properly safeguarded; and that reliable records are maintained.

The Provincial Auditor of Saskatchewan has audited the financial statements. His report to the members of the Legislative Assembly precedes the financial statements.



Neil Gardner
Chief Executive Officer – SHIN

June 1, 2006

Auditor's Report

To the Members of the Legislative Assembly of Saskatchewan

I have audited the statement of financial position of the Saskatchewan Health Information Network as at March 31, 2006 and the statements of operations, change in net financial assets, and cash flows for the year then ended. The Corporation's management is responsible for preparing these financial statements for Treasury Board's approval. My responsibility is to express an opinion on these financial statements based on my audit.

I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In my opinion, these financial statements present fairly, in all material respects, the financial position of the Corporation as at March 31, 2006 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

Fred Wendel, CMA, CA
Provincial Auditor
Regina, Saskatchewan

June 1, 2006

2005-2006 Financial Statements

Statement 1

Saskatchewan Health Information Network
Statement of Financial Position
as at March 31, 2006

(thousands of dollars)

	March 31, 2006	March 31, 2005
Financial Assets		
Due from General Revenue Fund (Note 3)	$ 13,421	$ 17,006
Receivable from Saskatchewan Health	309	2,697
Other Accounts Receivable	7,812	4,206
	21,542	23,909
Liabilities		
Accounts Payable and Accrued Liabilities	2,093	3,661
Deferred Revenue (Note 10)	16,250	18,673
Obligations Under Capital Leases	–	225
	18,343	22,559
Net Financial Assets (Statement 3)	3,199	1,350
Non-financial Assets		
Tangible Capital Assets (Note 5)	24,415	16,117
Prepaid Assets	512	552
	24,927	16,669
Accumulated Surplus (Statement 2)	$ 28,126	$ 18,019

(See accompanying notes to financial statements)

Statement 2

Saskatchewan Health Information Network
Statement of Operations
for the year ended March 31, 2006

(thousands of dollars)

	March 31, 2006 (Budget-Note 4)	March 31, 2006	March 31, 2005
Revenue			
Grants from Saskatchewan Health	$ 26,757	$ 17,824	$ 13,228
Canada Health Infoway Funding	9,872	5,427	4,492
Operating Room Scheduling Funding	350	390	125
Interest and Other Revenue	1,735	1,575	1,769
	38,714	25,216	19,614
Expenses			
Accommodation Expense	395	389	333
Amortization	–	3,390	6,382
CommunityNet	2,676	2,373	2,341
Corporate Services	647	156	206
Infrastructure	1,097	453	205
Ongoing Operations	7,500	7,765	7,355
Purchased Services	100	583	795
	12,415	15,109	17,617
Annual Surplus	$ 26,299	$ 10,107	$ 1,997
Accumulated Surplus, at beginning of year		18,019	16,022
Accumulated Surplus, at end of year (Statement 1)		$ 28,126	$ 18,019

(See accompanying notes to financial statements)

Statement 3

Saskatchewan Health Information Network
Statement of Change in Net Financial Assets
for the year ended March 31, 2006

(thousands of dollars)

	March 31, 2006	March 31, 2005
Annual Surplus	$ 10,107	$ 1,997
Acquisition of Tangible Capital Assets	(11,688)	(7,811)
Amortization of Tangible Capital Assets	3,390	6,382
	(8,298)	(1,429)
Use of Prepaid Assets	40	(166)
	40	(166)
Increase in Financial Assets	1,849	402
Net Financial Assets at beginning of year	1,350	948
Net Financial Assets at end of year (Statement 1)	$ 3,199	$ 1,350

(See accompanying notes to financial statements)

Statement 4

Saskatchewan Health Information Network
Statement of Cash Flows
for the year ended March 31, 2006

(thousands of dollars)

	March 31, 2006	March 31, 2005
Cash Flows From Operating Activities		
Cash Receipts	$ 21,574	$ 33,003
Cash Paid To Suppliers And Others	(13,247)	(10,394)
Increase in Operating Activities For The Year	8,327	22,609
Cash Flows From Investing Activities		
Purchase Of Tangible Capital Assets	(11,688)	(7,811)
Decrease In Investing Activities For The Year	(11,688)	(7,811)
Cash Flows From Financing Activities		
Decrease In Obligation To Saskatchewan Opportunities Corporation	–	(83)
Net Change in Obligations Under Capital Leases	(224)	(285)
Decrease In Financing Activities For The Year	(224)	(368)
Net (Decrease)/Increase In Due From General Revenue Fund	(3,585)	14,430
Due From General Revenue Fund, Beginning Of The Year	17,006	2,576
Due From General Revenue Fund, End Of The Year	$ 13,421	$ 17,006

Saskatchewan Health Information Network
Notes to the Financial Statements
for the year ended March 31, 2006

(thousands of dollars)

1. Description of Business

The Saskatchewan Health Information Network (SHIN) was established as a Treasury Board Crown Corporation by Order in Council 581/1997 under the provisions of *The Crown Corporations Act, 1993* (Act) effective August 19, 1997.

SHIN was created to design, implement, own, operate, and manage a Saskatchewan Health Information Network. SHIN's purpose is to foster the development of the health information technology sector, to foster re-engineering of health delivery processes and to protect health information as a strategic resource.

2. Significant Accounting Policies

These financial statements are prepared using Canadian generally accepted accounting principles appropriate for the public sector and reflect the following significant accounting principles:

a) The Basis of Accounting

The financial statements are prepared on the accrual basis of accounting.

b) Revenue

Revenues are recognized in the period in which the transactions or events occurred that gave rise to the revenues.

c) Expenses

Expenses represent the cost of resources consumed during the year for operations. Expenses include provision for the amortization of tangible capital assets.

d) Tangible Capital Assets

Tangible capital assets are recorded at cost and are amortized over their useful life. Amortization is recorded, commencing with the quarter after the assets are placed into service, on a straight-line basis at the annual rates set out below:

Desktop Computer Hardware	33%
Computer Software	33%
Network Hardware, Software & System Development costs	20%
Office Equipment	20%
Office Furniture	10%

e) Non-financial assets

Tangible capital and other non-financial assets are accounted for as assets because they can be used to provide services in future periods. These assets do not normally provide resources to discharge liabilities unless they are sold.

f) Measurement Uncertainty

The preparation of financial statements in accordance with Canadian generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amount of financial assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenues and expenses during the reporting period. These estimates are reviewed periodically, and, as adjustments become necessary, they are reported in earnings in the period in which they become known.

3. Due from the General Revenue Fund

SHIN's bank account is included in the Consolidated Offset Bank Concentration arrangement for the Government of Saskatchewan.

Earned interest is calculated and paid by the General Revenue Fund on a quarterly basis into the Corporation's bank account using the Government's thirty-day borrowing rate and SHIN's average daily account balance.

4. Budget Approval

Saskatchewan Health Information Network's budget is approved by the Board.

5. Tangible Capital Assets

(thousands of dollars)

	March 31, 2006						March 31, 2005
	Desktop Computer Hardware & Software	Computer Network Hardware	Licensed or Multiple Application Software	Office Furniture & Equipment	System Development Costs	Total	Total
Opening Cost	$ 1,074	$ 5,392	$ 6,898	$ 658	$ 31,136	$ 45,158	$ 37,349
Additions During the Year	–	30	–	–	11,658	11,688	7,810
Disposals	–	–	–	–	–	–	–
Closing Cost	1,074	5,422	6,898	658	42,794	56,846	45,159
Opening Accumulated Amortization	1,072	5,089	6,278	450	16,152	29,041	22,660
Annual Amortization	2	181	583	36	2,588	3,390	6,382
Disposals	–	–	–	–	–	–	–
Closing Accumulated Amortization	1,074	5,270	6,861	486	18,740	32,431	29,042
Subtotal	$ –	$ 152	$ 37	$ 172	$ 24,054	$ 24,415	$ 16,117

Included in the System Development Cost are $12,339 invested in systems that are currently not in production and therefore not amortized.

6. Maintenance Agreements for Software

SHIN has several agreements with software vendors to provide maintenance for software that has been purchased by SHIN. $1,960 (2005–$1,723) is committed (or paid) for the current year and will likely continue into the future.

7. Related Parties

These financial statements include routine transactions with related parties. SHIN is related to all Saskatchewan Crown agencies such as departments, corporations, bc ards and commissions under the common control of the Government of Saskatchewan. Related party transactions to March 31, 2006, include the following:

(thousands of dollars)

	2006	2005
Revenue		
Regional Health Authorities	$ 419	$ 127
Saskatoon Health Region (Telehealth Saskatchewan)	–	42
Saskatchewan Association of Health Organizations	17	–
Accounts Receivable		
Regional Health Authorities	412	45
Saskatchewan Opportunities Corporation	6	–
Expenditures		
Regional Health Authorities	881	478
Saskatchewan Association of Health Organizations	1,023	22
Saskatchewan Cancer Agency	7	7
Saskatchewan Opportunities Corporation	408	422
Department of Property Management	1,885	1,854
SaskTel	932	2,121
Other	–	15
Accounts Payable		
Regional Health Authorities	112	19
Saskatchewan Association of Health Organizations	140	–
Saskatchewan Cancer Agency	1	1
Saskatchewan Opportunities Corporation	–	14
SaskTel	10	47

(thousands of dollars)

Other transactions with related parties and amounts due to/from them are described separately in the financial statements and the notes thereto.

Routine operating transactions with related parties are recorded at the rates charged by those organizations and are settled on normal trade terms. In addition, SHIN pays Provincial Sales Tax to the Saskatchewan Department of Finance on all its taxable purchases.

Saskatchewan Health provides management and technical services to Saskatchewan Health Information Network without charge.

8. Financial Instruments

SHIN's financial instruments include due from the General Revenue Fund, accounts receivable and accounts payable. The carrying amount of these instruments approximates fair value due to their short-term nature. These instruments have no interest or credit risk.

9. Operating Leases

SHIN has entered into a lease agreement with Saskatchewan Opportunities Corporation, a related party, for office space, which expires on April 30, 2009. The operating lease payments for the following three years are as follows:

2007	$ 170
2008	176
2009	183
Total Lease Payments	$ 529

SHIN has entered into several lease agreements with Hewlett-Packard Financial Services Canada Company and GE VFS Canada Limited Partnership, for equipment. The operating lease payments over the next three years are as follows:

2007	$ 400
2008	252
2009	50
Total Lease Payments	$ 702

(thousands of dollars)

10. Deferred Revenue

As of March 31, 2006 SHIN's deferred revenue balance is $16,250. Deferred revenue is only expended once all project planning and due diligence (including stakeholder readiness) is completed and other revenue opportunities (such as Canada Health Infoway) are maximized. The deferred revenue has been provided by Saskatchewan Health and is commited to developing information technology systems that support frontline delivery, improve access, quality and efficiency of care.

Deferred Revenue	April 1, 2005	05/06 Expenditures	Additional Funds	March 31, 2006
First Ministers Funding				
Integrated Clinical System	$ 1,618	$ 1,144	$ –	$ 474
Shared Client Index	1,534	823	–	711
Diagnostic Imaging	3,500	235	–	3,265
Laboratory Results Reporting (Saskatchewan Lab/iEHR)	3,000	170	–	2,830
Surgical Information System (OR Scheduling)	2,000	43	–	1,957
ESP Staff Scheduling Project	3,000	968	–	2,032
Total First Ministers Funding	14,652	3,383	–	11,269
Other Deferred Revenue				
PHS Information Technology	2,410	–	421	2,831
Provincial Laboratory System	–	–	1,000	1,000
DI Wait List Registry	1,000	298	–	702
EMS Dispatch	304	–	–	304
Shared Client Index	166	150	–	16
Renal Data Management	96	–	–	96
West Nile	45	13	–	32
Total Other Deferred Revenue	4,021	461	1,421	4,981
TOTAL Deferred Revenue	**$ 18,673**	**$ 3,844**	**$ 1,421**	**$ 16,250**

(thousands of dollars)

11. Commitments

As of March 31, 2006 SHIN is commited to developing information technology applications totalling $7,149. The following table outlines the 2007 funds dedicated for capital expenditures, the corresponding funding agency, and the percentage refundable.

Capital Expenditure Project	Total Budgeted Costs	05/06 Expenditures	06/07 Committed Expenditures	Percentage Refundable	Funding Agency
Shared Client Index	$ 5,334	$ 3,556	$ 1,778	75%	Canada Health Infoway
Diagnostic Imaging	1,609	1,175	434	100%	Canada Health Infoway
Saskatchewan Lab/iEHR	1,233	671	562	75%	Canada Health Infoway
Chronic Disease Management Toolkit	670	349	321	67%	Health Quality Council
ESP Staff Scheduling Project	3,000	968	2,032	–	
Surgical Information System (OR Scheduling)	1,826	441	1,385	–	
Integrated Clinical System	1,028	465	563	–	
Other	217	143	74	–	
Total Commitments	$ 14,917	$ 7,768	$ 7,149		

12. Comparative Figures Notes

Prior year figures have been reclassified to conform to present year presentation.

Saskatchewan Health Information Network
Payee List
For the Year Ended March 31, 2006
(Unaudited)

Supplier Payments

Listed are payees who received $50,000 or more for the provision of goods and services, including office supplies, communications, contracts and equipment.

Vendor	Total Cost (thousands of dollars)
SAIC Canada	$ 6,267
IBM Canada Ltd. (Vancouver)	2,150
Saskatchewan Property Management	1,885
Initiate Systems Inc.	1,340
SaskTel	932
Paradigm Consulting Group Inc.	922
Saskatchewan Association of Health Organizations	889
Momentum Healthware	606
Saskatoon Regional Health Authority	423
Inverness Consulting	413
MacPherson, Leslie & Tyerman	410
Saskatchewan Opportunities Corporation	408
CGI Information Systems	394
Triple G Corporation	371
Solvera	324
Picis Inc.	312
Promed Associate Ltd.	298
Minister of Finance	282
Computer Associates Canada Company	278
Eclipsys Corporation	276
Canada Customs and Revenue Agency	275
Hewlett-Packard Financial Services	273
NexInnovations Inc.	238
Regina Qu'Appelle Regional Health Authority	213
Praxia Information Intelligence	200
Hewlett-Packard (Canada) Co.	198
Eithne Reichert	169
Technology Management Corporation	168
KDS Consulting Services Inc.	168
Entryport Corporation	167
Quay Solutions Ltd.	157
First DataBank	153
ISIS Health Informatics Resource	153
Commercial Data Systems Ltd.	144
Interactive Business Systems, Inc.	113
Develus Systems Inc.	113
SNC Lavalin Incorporated	100
GE VFS Canada Ltd. Partner	86
Prince Albert Parkland Regional Health Authority	76
Horizon Computer Solutions	67
SAS Institute (Canada) Inc.	66
Diane Wells	60
Vital Statistics Agency	59
MediSolution	53
Information Security Technology	51
TOTAL SUPPLIER PAYMENTS	$ 22,700